



## DECISION MEMO

### Waw'áalamnima Large Woody Debris Project

USDA Forest Service, Northern Region  
Nez Perce – Clearwater National Forests  
Lochsa-Powell Ranger District  
Idaho County, Idaho



#### I. Introduction

I have decided to approve the Waw'áalamnima Large Woody Debris Project on the Lochsa-Powell Ranger District in the Nez Perce-Clearwater National Forests, Idaho County, Idaho. The Project area is located in T37N, R13W, Sections 19, 30 and 31 Boise Meridian. (See attached maps).

#### II. Purpose and Need

In 2012 an instream wood survey was completed by Nez Perce Tribal Watershed staff to understand the role of large wood in several Powell streams. The survey looked at man-made log weirs constructed in nine Lochsa River tributaries and identified potential impacts to fish passage (Christian *et al* 2013). The project also compared the abundance of naturally recruited Large Woody Material (LWM) along road-side adjacent reaches versus roadless reaches. This survey was designed to assess the current condition of area streams as they relate to the primary limiting factors. Loss of large wood, structural complexity and inadequate fish passage are identified as some of the factors limiting abundance and survival of Snake River Steelhead in the Lochsa watershed. The large wood survey determined that Waw'áalamnima Creek currently has only about half of the total wood (particularly log jams) compared to the reference conditions within the analysis area.

Waw'áalamnima Creek along Forest road 108 contains over 30 straight log weirs that were installed in the 1980s. Level, rigid weirs often have negative impacts on channels. They tend to create channels that are trapezoidal and uniform in cross section. Even though full channel-spanning level structures may look like natural embedded wood structures, they generally lack the variety of passageways found in more complex natural structures. These kinds of structures commonly fail by scouring either under or around the end of the structure. Rigid structures are more likely than adjustable rock structures to become barriers to fish passage when downstream scour occurs (Christian *et al* 2013).

While most of the log weirs surveyed in Waw'áalamnima Creek were functioning as designed with regards to providing pool habitat, 64% of the log weirs had the potential to create a full or partial passage barrier to resident species (bull trout and westslope cutthroat trout). Of the structures that were identified as passage barriers, 19% pose an actual passage barrier at some flow, and 44% potentially pose a barrier for anadromous fishes.

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This project is being implemented to: (1) help increase stream channel complexity, refugia and hiding cover, (2) improve floodplain connectivity, (3) decrease width to depth ratios, (4) decrease unstable banks, (5) restore natural pool and riffle formation, and (6) increase exposure and deposition of spawning gravels.

The project is needed to meet the following Clearwater National Forest Plan (Plan) goals, objectives and standards:

Threatened and Endangered Species goal (Plan, p. II-2): Manage habitat to contribute to recovery of each threatened and endangered species occurring on the Forest.

Fisheries goal (Plan, p. II-2): Manage the Forest's fishery streams to achieve optimum levels of fish production by: (2) rehabilitating and improving degraded streams...

Water Quality and Soil goal (Plan, p. II-3): Manage watersheds, soil resources, and streams... to protect all beneficial uses of the water, which include fisheries, water-based recreation, and public water supplies.

Wildlife and Fish objective (Plan, II-5): Restore selected, presently degraded fish habitat through habitat improvement projects designed to achieve stated objectives...

### Management Area M2 (Riparian Area)

Wildlife and Fish goal (Plan, III-69): ... Construct new structures to improve or restore degraded habitat.

Water and Soil goal (Plan, III-70): Conduct watershed and stream improvements that will:

- (1) Enhance riparian and water resources.
- (2) Rehabilitate and/or mitigate the adverse effects of fire, flood, and other natural or management related causes.

Wildlife and Fish standard 5.j. (Plan, II-24): Cooperate with Idaho Fish and Game, Indian Tribes, and other agencies in the management of wildlife and fish habitat.

### **Project Design / Environmental Mitigation**

The Forest, in partnership with the Nez Perce Tribe, is proposing to enhance fish habitat by installing additional large woody material in lower Waw'áalamnima Creek adjacent to Forest service Road 108. The lack of large woody material in this stream is a limiting factor for the abundance and productivity of the Lochsa population of threatened Snake River Steelhead.

A contractor will use an excavator to place the wood. The original access created to install the log weirs will be used in order to produce as little new ground disturbance as possible. Two to three logs with rootwads will be strategically placed at approximately eleven previously installed cross log weirs to create better juvenile fish passage at these sites over time. There will be no mechanical anchors or cables to hold the logs.

Design Criteria includes the following:

- Most logs for the project will be sourced from within the RHCA within 300 feet from the site where they are to be installed.
- Work will be conducted during low flow conditions and would follow any terms and conditions imposed by the ESA regulatory agencies.
- Any required permits for disturbance of water or wetlands will be obtained prior to initiating work (Army Corps of Engineers 404 permit, Idaho Department of Water Resources Stream Alteration Permit).
- All equipment and vehicles will be thoroughly cleaned prior to entering project sites to prevent the introduction and/or spread of noxious weeds.
- Mechanical support will follow BMPs for fuel storage and machine fueling to minimize the risk of a fuels spill into live water.
- The contractor will have fuel spill containment supplies onsite in the event of a fuel spill and their employees would be trained in the proper application and use of those materials.
- Equipment that will be used in live water will utilize hydraulic fluid that is non-toxic to salmonids.

**Project Implementation:** It is anticipated that this project will start in July (2017) and take approximately two weeks to complete.

### III. Rationale for Decision and Reasons for Categorically Excluding the Decision

#### Category of Exclusion and Rationale for Using the Category

Based on information in this document and the project record, I have determined this project is not significant in either context or intensity (40 CFR 1508.27), that no extraordinary circumstances affecting resource conditions exist (36 CFR 220.6), that this project may be categorically excluded from documentation in an EA or EIS, and that it meets all the criteria outlined in 36 CFR 220.6(e)(19): *Removing and/or relocating debris and sediment following disturbance events (such as floods, hurricanes, tornados, mechanical/engineering failures, etc.) to restore uplands, wetlands, or riparian systems to pre-disturbance conditions, to the extent practicable, such that site conditions will not impede or negatively alter natural processes.*

*(iii) Stabilizing stream banks and associated stabilization structures to reduce erosion through bioengineering techniques following a flood event, including the use of living and nonliving plant materials in combination with natural and synthetic support materials, such as rocks, riprap, geo-textiles, for slope stabilization, erosion reduction, and vegetative establishment and establishment of appropriate plant communities (bank shaping and planting, brush mattresses, log, root wad, and boulder stabilization methods).*

The rationale for my decision is based on: (1) the proposed action fully meeting the criteria for Categorical Exclusions, (2) the proposed action meeting the purpose and need, (3) the findings related to extraordinary circumstances, discussed below, (4) the project's consistency with laws and regulations, (5) the on-the-ground review and discussion with District resource specialists, and (6) my review of the Biological Assessments (BA), Biological Evaluations (BE), and specialists' reports.

**Finding of the Absence of Extraordinary Circumstances to Resource Conditions**

**1. Federally listed threatened or endangered species or designated critical habitat, species proposed for Federal listing or proposed critical habitat or Forest Service sensitive species.**

The Forest Interdisciplinary (ID) Team Botanist determined the project would have “no effect” to federally listed plant species and/or their habitats. The Botanist also determined the project “may adversely impact individuals or habitat” of the following R1 Sensitive species: deerfern, crenulate moonwort, lance-leaf moonwort, Mingan moonwort, mountain moonwort, northern moonwort, green bug-on-a-stick, clustered lady’s slipper, light hookeria, naked-stem rhizomnium, short-style sticky tofieldia, and Idaho barren strawberry.

The mesic forest habitats along the riparian area of Waw'áałamnima Creek provide suitable habitat for the above plant species. Only clustered lady’s slipper is known to occur in the area; however, other species are possible and perhaps likely to occur. Impacts to the species would be from mechanical harm during placement of the large woody material. Project activities would disturb a very small fraction of the potential suitable habitat. While individual plants may be harmed (if they occur in the project area), the habitat to support these species would be maintained and possibly enhanced by improving the hydrology of the mesic forest habitat.

The ID Team Wildlife Biologist determined the project would be “not likely to adversely affect” Canada lynx or its habitat. The project is outside of an LAU. Disturbance associated with project activities (human presence, equipment noise, etc.) could cause individuals to avoid the area during implementation. The overall effects, however, would be minor and temporary. The project falls under the 2014 Programmatic for Lynx, Grizzly Bear and Lynx Critical Habitat under “Any activities outside of a LAU”. The Biologist also determined the project would present “no jeopardy” to the North American wolverine. Modeled wolverine habitat is not present within the project area.

A “may adversely impact individuals or habitat” determination was made for flammulated owl, harlequin duck, pygmy nuthatch, fisher, fringed, long-eared and long-legged myotis, gray wolf, and Western (boreal) toad. Habitat for the species listed would not be altered. Disturbance associated with project activities (human presence, equipment noise, etc.) could cause individuals to avoid the area during implementation. The overall effects, however, would be minor and temporary. Individual Western toads may be impacted (direct mortality or injury) from the proposed activities; any impacts would not result in a loss of population viability.

The IDT Fish Biologist determined project would “likely adversely affect” bull trout and steelhead trout, federally threatened species. The species and designated critical habitat are found within the project site on Waw'áałamnima Creek. A “no effect” determination was made for Fall Chinook Salmon. The species occurs several miles below the project site on the Middle Fork Clearwater River. The Forest consulted with the US Fish and Wildlife Service and the National Marine Fisheries Service, using the USFS, Region 1 (R1) “Idaho Habitat Restoration Programmatic”. Concurrence from the U.S. Fish and Wildlife Service and National Marine Fisheries Service was received on March 27, 2017 and February 28, 2017, respectively. The project would comply with all Terms and Conditions and Design Criteria in the Programmatic.

A “may adversely impact individuals or habitat” determination was made for Westslope cutthroat trout and Spring Chinook salmon. Both species are present within the project area. Installing additional large woody material within lower Waw'áalamnima Creek would have short-term turbidity impacts; however, any effects to the species would be minimized given project design criteria. The project would improve habitat for the species over the long term.

Based on the above assessment, no effects exist that will cause an incremental cumulative effect and no extraordinary circumstances were identified for these resources. For the complete analyses, see the Fishery, Wildlife and Botany Biological Assessments and Evaluations and specialists' reports in the project record.

## **2. Floodplains, wetlands, or municipal watersheds.**

The Forest Hydrologist has determined the project would have no adverse direct or indirect effects to floodplains or wetlands. There are no municipal watersheds within the project area. No cumulative significant, adverse effects to floodplains or wetlands are expected for this project. Any cumulative effects (if they occur) would be most noticeable at the site scale, becoming progressively less discernible at the sub-watershed, watershed, and sub-basin scales. Given the low degree of anticipated site-level effects, cumulative effects are expected to be negligible. The proposed project is consistent with all applicable State and Federal water quality laws because project design criteria and best management practices (BMPs) have been included to protect water resources.

Based on this analysis, no extraordinary circumstances were identified regarding the effects to water quality of streams within the area; downstream waters; or resources in floodplains, wetlands, and municipal watersheds; thereby complying with EO 11988, EO 11990, and FSH 1909.15 Chapter 31.2.2.

## **3. Congressionally designated areas, such as wilderness, wilderness study areas or national recreation areas.**

The project is not located in a wilderness, wilderness study area or national recreation area.

## **4. Inventoried Roadless areas or potential wilderness areas.**

The project is not located in a roadless area or potential wilderness area.

## **5. Research Natural Areas.**

The project is not within or adjacent to any Research Natural Area.

## **6. American Indians and Alaska native religious or cultural sites.**

A cultural resource records search has been conducted for this project. The Forest Cultural Resource Specialist has determined the project has little likelihood to adversely affect historic properties. As a result, a *No Inventory Decision* has been made. Based on this analysis, no extraordinary circumstances were identified to native religious or cultural sites.

**7. Archaeological sites or historical properties or areas.**

The Idaho State Historic Preservation Officer, or the Forest Archaeologist via the use of the North Idaho Programmatic Agreement, has determined that no archaeological or historic property will be adversely affected by this project. Therefore, no extraordinary circumstances were identified to these resources.

**IV. Interested and Affected Agencies, Organizations, and Persons Contacted**

On December 30, 2014, letters providing information and seeking public comment were mailed to individuals, organizations, state and local agencies, and the Nez Perce and Coeur d'Alene tribes. Four individuals/organizations commented during the public comment period, and their comments are addressed in Appendix A. The original letters are available in the project record.

**V. Findings Required by other Laws**

Based on my review of the actions associated with this project, I find that the Waw'áałamnima Large Woody Debris Project is consistent with applicable Federal laws and regulations, including the standards and guidelines contained in the 1987 Clearwater National Forest Plan, as amended, as required by the National Forest Management Act of 1976. My decision also complies with all Federal, state or local laws or requirements for the protection of the environment and cultural resources, as follows:

**National Forest Management Act and Nez Perce National Forest Plan:** This action is consistent with the standards and guidelines contained in the 1987 Clearwater National Forest Plan, as amended, as required by the National Forest Management Act of 1976. In addition, design features and mitigation measures ensure compliance with the act.

**PACFISH Riparian Habitat Conservation Areas (RHCAs):** All activities associated with the proposed action comply with direction regarding PACFISH (refer to the project record).

**Clean Water Act and State Water Quality Laws:** The ID Team Hydrologist has determined that this project complies with the Clean Water Act and state water quality laws, and will protect beneficial uses.

**Endangered Species Act:** A Forest Service Fish Biologist, Wildlife Biologist, and Botanist evaluated the proposed action with regard to the Endangered Species Act as documented in the Biological Assessments, Biological Evaluations, and specialist's reports, and determined this project is consistent with the Endangered Species Act.

**Migratory Bird Treaty Act:** This project complies with the Migratory Bird Treaty Act since it will result in no substantial loss of migratory bird habitat, nor will there be any measurable impact(s) on Neotropical migratory bird populations as a whole.

The project complies with the U.S. Fish and Wildlife Service Director's Order #131 related to the applicability of the Migratory Bird Treaty Act to Federal agencies and requirements for permits for "take." In addition, this project complies with Executive Order 13186 because the analysis meets agency obligations as defined under the January 16, 2001 Memorandum of

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Understanding between the Forest Service and U.S. Fish and Wildlife Service designed to complement Executive Order 13186.

**National Historic Preservation Act:** Because no cultural properties are located within the area of potential effects, the Forest Cultural Resource Specialist has made a "no historic properties affected" determination for the project per the North Idaho Programmatic Agreement. Therefore, this project meets the agency's responsibilities under the National Historic Preservation Act (16 USC 470), as amended, and is consistent with the *Programmatic Agreement between the Idaho State Historic Preservation Officer, the Advisory Council on Historic Preservation and the Region 1 National Forests in Northern Idaho Regarding the Management of Cultural Resources*.

**American Indian Treaty Rights:** The Nez Perce and Coeur d'Alene Tribal staffs have had the opportunity to review the project for impacts to Nez Perce and Coeur d'Alene Tribal Treaty rights or their members' abilities to exercise those rights. The Nez Perce and Coeur d'Alene Tribes did not identify any concerns.

**Other Laws or Requirements:** The proposed action is consistent with all other Federal, State or local laws or requirements for the protection of the environment and cultural resources.

**VI. Contact Person**

Questions regarding this decision should be sent to Jeff Chynoweth, Small NEPA Team Coordinator, c/o Nez Perce-Clearwater Supervisor's Office, 903 Third Street, Kamiah, Idaho 83536 or by telephone to (208) 935-4260 or FAX at (208) 935-4275 during business hours (M-F, excluding Federal holidays, 7:30 a.m. to 4:30 p.m., PST).

**VII. Signature of Deciding Officer**



BRANDON KNAPTON  
Lochsa-Powell District Ranger

7/10/2017

Date

cc: Rebecca Lloyd, Anne Connor

Enclosures (1): Map



Map of the Waw'áalamnima Large Woody Debris Project

